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# MEAN WELL

## SWITCHING POWER SUPPLY

**ISO-9001 CERTIFIED MANUFACTURER**

## MPS-65 SERIES

**Jameco Part Number 221209 (MPS-65-48)**

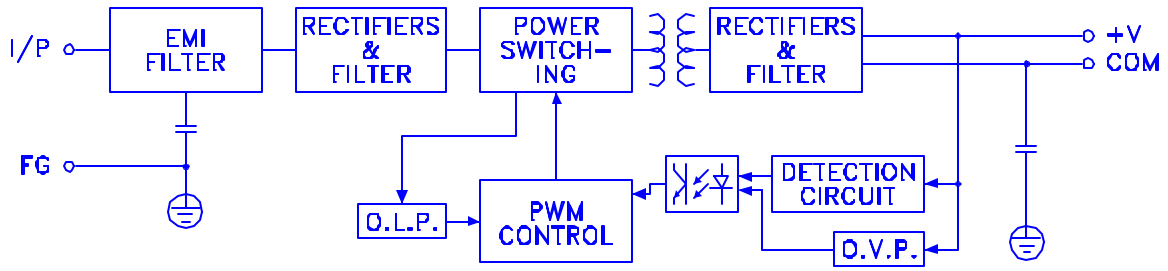
.LOW COST, HIGH RELIABILITY
.105°C OUTPUT CAPACITOR
.INTERNATIONAL AC INPUT RANGE
.HIGH EFFICIENCY, LOW WORKING TEMPERATURE
.SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
.SHORT CIRCUIT, OVERLOAD, OVER VOLTAGE PROTECTED
.COMPACT SIZE, LIGHT WEIGHT
.100% FULL LOAD BURN-IN TEST
.BUILT IN EMI FILTER, LOW RIPPLE NOISE

| SPECIFICATION / MODEL | MPS-65 -3.3 | MPS-65 -5 | MPS-65 -7.5 | MPS-65 -12 | MPS-65 -13.5 | MPS-65 -15 | MPS-65 -24 | MPS-65 -27 | MPS-65 -48 |
|---|---|---|---|---|---|---|---|---|---|
| DC OUTPUT VOLTAGE | 3.3V | 5V | 7.5V | 12V | 13.5V | 15V | 24V | 27V | 48V |
| OUTPUT V. TOLERANCE | ±3% | ±3% | ±3% | ±2% | ±2% | ±2% | ±2% | ±2% | ±2% |
| OUTPUT RATED CURRENT | 12A | 12A | 8A | 5.2A | 4.7A | 4.2A | 2.7A | 2.4A | 1.35A |
| OUTPUT MIN. CURRENT | 0A | 0A | 0A | 0A | 0A | 0A | 0A | 0A | 0A |
| OUTPUT MAX. CURRENT | 15.2A | 13.8A | 9.6A | 6A | 5.4A | 4.8A | 3A | 2.7A | 1.5A |
| RIPPLE & NOISE (Vp-p) | 80m | 100m | 100m | 100m | 100m | 100m | 100m | 100m | 100m |
| LINE REGULATION | ±1% | ±1% | ±1% | ±1% | ±1% | ±1% | ±1% | ±1% | ±1% |
| LOAD REGULATION | ±3% | ±3% | ±3% | ±2% | ±2% | ±2% | ±2% | ±2% | ±2% |
| RATED OUTPUT POWER | 39.6W | 60W | 60W | 62.4W | 63.5W | 63W | 64.8W | 64.8W | 64.8W |
| MAXIMUM OUTPUT POWER | 72W (+3.3V:50W;+5V:69W) WITH 18 CFM MIN. FORCED AIR CONVECTION | | | | | | | | |
| EFFICIENCY | 66% | 74% | 76% | 77% | 78% | 79% | 80% | 80% | 80% |
| DC VOLTAGE ADJ. | ±10% | | | | | | | | |
| INPUT VOLTAGE RANGE | 90~264VAC 47~440Hz ; 127~370VDC | | | | | | | | |
| AC CURRENT | 1.6A/115V 0.9A/230V | | | | | | | | |
| INRUSH CURRENT | COLD START 20A/115V 40A/230V | | | | | | | | |
| LEAKAGE CURRENT | <0.3mA/264VAC | | | | | | | | |
| OVERLOAD PROTECTION | 73~105W (3.3V:51~75W)(5V:70~105W) TYPE:PULSING HICCUP SHUTDOWN RESET:AUTO RECOVERY | | | | | | | | |
| OVER VOLTAGE PROTECTION | 115%~135% | | | | | | | | |
| TEMP. COEFFICIENT | ±0.04% / °C (0~50°C) | | | | | | | | |
| SETUP, RISE, HOLD UP TIME | 800ms, 30ms, 20ms/230VAC 800ms, 30ms, 12ms/115VAC | | | | | | | | |
| VIBRATION | 10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES | | | | | | | | |
| WITHSTAND VOLTAGE | I/P-O/P:4KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC | | | | | | | | |
| ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:500VDC / 100M Ohms | | | | | | | | |
| WORKING TEMP., HUMIDITY | -10°C~+60°C(REFER TO OUTPUT DERATING CURVE), 20%~90% RH | | | | | | | | |
| STORAGE TEMP., HUMIDITY | -20°C~+85°C, 10%~95% RH | | | | | | | | |
| DIMENSION | 127*76.2*42mm (L*W*H) PCB ONLY | | | | | | | | |
| WEIGHT | 0.28Kgs | | | | | | | | |
| SAFETY STANDARDS | UL2601-1, EN60601-1 APPROVED | | | | | | | | |
| EMC STANDARDS | CISPR11 (EN55011), IEC61000-4-2,3,4,5,6,8,11 IEC61000-3-2,3 EN60601-1-2 VERIFICATION | | | | | | | | |

NOTE :
1.ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25°C 70% RH. AMBIENT.
2.TOLERANCE GINCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.
3.RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
4.LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.
5.MOUNTING HOLES M1 AND M2 SHOULD BE GROUNDED FOR EMI PURPOSES.

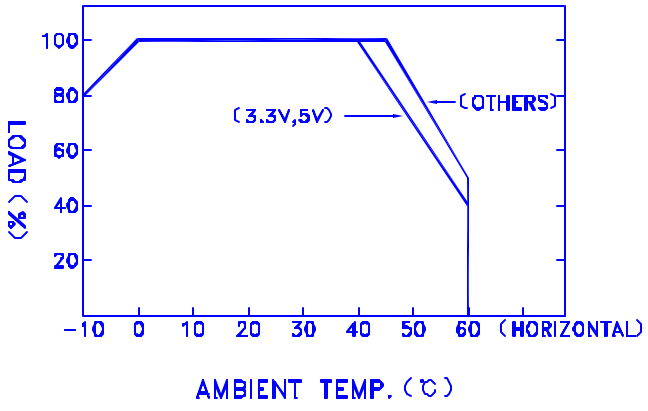
2002-04-29

## BLOCK DIAGRAM

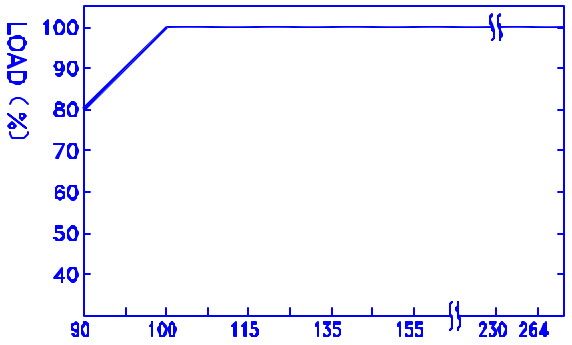



fosc : 45KHz

## OUTPUT DERATING




## STATIC CHARACTERISTICS




## DIMENSION (mm)

☒ TERMINAL PIN NO. ASSIGNMENT
- ☒ CN1 : MOLEX 5277-02
  PIN 1,2 : AC INPUT
- ☒ CN2 : MOLEX 5273-06
  PIN 1,2,3 : DC OUTPUT +V
  PIN 4,5,6 : DC OUTPUT GND

☒ MATING CONNECTORS
- ☒ CN1,2 MATING CONNECTOR TYPE MOLEX 5195 AND 5239 SERIES OR EQUIVALENT WITH MOLEX 5194 AND 5225 OR EQUIVALENT CRIMP TERMINALS.